

Assessing Purity in the Halal Poultry Supply Chain: A Case Study of Malaysian Poultry Industries

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Abstract

The concept of Halal, deeply rooted in Islamic principles, emphasizes purity alongside hygiene, safety, and quality. Despite stringent regulations in Malaysia's poultry industry, challenges such as contamination and improper handling persist, raising concerns over religious compliance and consumer trust. This study explores the purity practices in the Malaysian Halal poultry supply chain, focusing on three major industry players. Using a qualitative approach with in-depth interviews and Atlas.ti analysis, the findings reveal industry strengths in purity practices and areas needing improvement. Continuous monitoring, stricter enforcement, and enhanced stakeholder awareness are critical for maintaining Halal integrity. These insights contribute to better regulatory frameworks and consumer assurance in the Halal poultry sector.

Keywords: Halal Poultry, Halal Supply Chain, Integrity, Pure, Poultry Industry.

Introduction

The concept of Halal, deeply rooted in Islamic jurisprudence, is more than a set of dietary laws; it represents a comprehensive ethical framework encompassing quality, hygiene, safety, and purity. For Muslim consumers, Halal integrity is paramount, as it ensures compliance with religious principles while safeguarding health and quality (Soraji et al., 2017). Among the various aspects of Halal integrity, the concept of "purity" holds particular significance. In the context of food production, purity extends beyond the exclusion of prohibited (haram) substances to encompass meticulous adherence to Islamic guidelines throughout the supply chain (Qader et al., 2022).

Malaysia, as a global leader in Halal certification and trade, plays a crucial role in setting benchmarks for Halal food production. The poultry industry, a cornerstone of Malaysia's Halal market, is subject to rigorous standards outlined by bodies such as the Department of Islamic Development Malaysia (JAKIM). Despite these stringent regulations, maintaining purity across the Halal poultry supply chain remains a persistent challenge. Issues such as contamination during processing, improper handling, and inconsistent adherence to certification requirements have been reported, raising concerns over religious non-compliance and undermining consumer trust (Wan Hassan et al., 2017).

While the global Halal market continues to grow exponentially, fuelled by rising consumer demand for Halal products, significant gaps remain in the understanding and implementation of purity practices. Existing studies have largely focused on general Halal compliance or specific supply chain issues, leaving the "pure" dimension of Halal integrity underexplored. In Malaysia, where the poultry industry serves both domestic and international markets, addressing these gaps is critical for sustaining industry credibility and meeting consumer expectations.

This study aims to bridge this gap by providing an in-depth analysis of purity practices in Malaysia's Halal poultry supply chain. By adopting a multiple case study approach, this research investigates how three leading poultry producers address purity challenges while adhering to Halal principles. Through interviews

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with key stakeholders and an analysis of regulatory frameworks, the study uncovers best practices, identifies critical challenges, and offers actionable recommendations to enhance Halal integrity.

The findings of this study not only contribute to the academic discourse on Halal supply chain management but also provide practical insights for industry stakeholders and policymakers. Ensuring the purity of Halal poultry products is essential not only for religious compliance but also for strengthening consumer confidence in Malaysia's Halal certification system. As the global demand for Halal products intensifies, this research underscores the importance of maintaining rigorous standards and continuous improvement to uphold Malaysia's reputation as a leader in Halal food production.

Problem Statement

The Halal poultry industry in Malaysia plays a pivotal role in both the local and global Halal markets, serving as a cornerstone of Muslim dietary practices and an economic driver for the country. As a leader in Halal certification and compliance, Malaysia has established stringent guidelines, including the Manual Procedure for Malaysia Halal Certification and MS1500:2019 Halal Food – General Guidelines (Ahmad et al., 2016). Despite these standards, maintaining integrity especially in purity dimension is a critical and remains a significant challenge (Zulfakar et al., 2012).

Purity in the Halal context is not merely about avoiding prohibited (haram) substances but also ensuring that the entire supply chain, from farm to table, adheres to Islamic principles (Wan Hassan et al., 2017). In the poultry industry, this encompasses practices such as using Halal-certified feed, humane treatment of animals, proper slaughtering techniques, contamination prevention, and Halal-compliant storage and transportation. However, various reports and studies have highlighted inconsistencies and lapses in these areas, such as cross-contamination during processing, improper handling of poultry, and insufficient monitoring of Halal assurance systems. These issues compromise the integrity of Halal certification, leading to potential religious non-compliance, diminished consumer trust, and reputational risks for the industry (Ashraf et al., 2018; Shahdan et al., 2016a, 2017).

While research on Halal supply chain management is growing, there is a lack of focused studies examining the "pure" dimension of Halal integrity within the poultry industry. Existing literature primarily addresses broader supply chain challenges or specific elements such as logistics and certification processes. However, the interconnected practices and systemic challenges associated with maintaining purity remain underexplored, particularly in Malaysia, where the Halal poultry market is a key contributor to the nation's Halal economy (Shahdan et al., 2016b).

Moreover, with the rising global demand for Halal-certified products, it is imperative to ensure that Malaysia's poultry industry not only complies with domestic standards but also meets international expectations (Suhazira Hanim et al., 2010). Addressing these challenges requires a deeper understanding of current practices, the effectiveness of existing guidelines, and the barriers to maintaining purity throughout the supply chain. Without this understanding, efforts to strengthen Halal certification systems and improve industry practices may fall short, jeopardizing Malaysia's position as a leader in the global Halal market.

This study, therefore, seeks to address these gaps by investigating the practices and challenges related to purity in the Malaysian Halal poultry supply chain. By examining the experiences of key industry stakeholders, this research aims to provide actionable insights that enhance Halal integrity, safeguard consumer trust, and uphold religious principles in the evolving Halal market.

Literature Review

Halal Supply Chain in the Poultry Industry

The Halal supply chain is a comprehensive framework ensuring that every stage of production, processing, and distribution adheres to Islamic principles. This framework is critical in the poultry industry, where compliance with Halal standards affects consumer trust and market competitiveness (Ali et al., 2022).

The concept of Halal extends beyond religious compliance to encompass ethical, hygienic, and quality considerations. The Halal supply chain for poultry includes critical processes such as sourcing Halal-compliant feed, adhering to humane slaughtering methods, and ensuring segregation of Halal and non-Halal products throughout the chain. In Malaysia, the Manual Procedure for Malaysia Halal Certification Domestic 2020 and MS1500:2019 Halal Food - General Guidelines serve as key regulatory frameworks guiding the industry (Omar et al., 2011).

Globally, the demand for Halal poultry has risen significantly, with the market projected to reach \$375 billion by 2030 (Poultry World, 2023). This growth underscores the importance of maintaining robust supply chain practices to meet both local and international standards. However, compliance varies widely across regions due to differing interpretations of Halal standards, highlighting the need for uniformity and strict adherence to guidelines (Fischer, 2008).

Purity Aspect in the Poultry Chain

The halal poultry supply chain is gaining importance due to the increasing global demand for halal products (Omar & Jaafar, 2011a). Key aspects of ensuring halal integrity in poultry production include animal feed sources, proper slaughtering, and segregation (Omar et al., 2019). The concept of "halalan tayyiban" extends beyond halal to encompass safety, quality, and cleanliness throughout the supply chain (Omar & Jaafar, 2011). Islamic values play a crucial role in shaping the halal supply chain, particularly at the retail level (Omar et al., 2013). The Halal Assurance System (HAS) has been developed to enhance halal integrity, with the emphasis on animal feed, medications, and animal welfare in broiler farming (Ramli & Rosman, 2020). Critical control points in the halal poultry supply chain, especially at the sourcing stage, are essential for maintaining halalan-toyyiban standards. These studies highlight the importance of a comprehensive approach to halal poultry production, from farm to consumer.

Purity is a core component of Halal integrity, requiring that poultry products remain free from any form of contamination or prohibited substances at every stage of the supply chain. The concept of purity, or *taharah*, in Islamic teachings, emphasizes cleanliness and the absence of impurities, both physical and spiritual (Riaz & Chaudry, 2004).

In the poultry supply chain, ensuring purity involves:

- Halal Feed: Sourcing feed that complies with Halal requirements and is free from prohibited additives (Alzeer et al., 2018).
- Slaughtering Practices: Adhering to Islamic methods of slaughter (*dhabh*), which include invoking the name of Allah and ensuring complete blood drainage (al-Qaradawi, 2013).
- Contamination Prevention: Implementing stringent measures to prevent cross-contamination with non-Halal products during processing, storage, and transportation (Wan-Hassan & Awang, 2009)
- Technological advancements, such as blockchain and IoT systems, have been proposed to enhance traceability and transparency, thereby strengthening purity assurance across the supply chain (Hashim et al., 2020).

Challenges in Maintaining Purity in the Poultry Supply Chain

Despite regulatory frameworks and technological innovations, the Halal poultry industry faces several challenges in maintaining purity:

- Cross-Contamination: Cross-contamination is one of the most pressing issues in the Halal poultry supply chain. Improper handling practices, shared equipment, and inadequate segregation can

compromise the Halal status of products. Studies have shown that many poultry producers lack dedicated Halal processing lines, increasing the risk of contamination (Zulfakar et al., 2014).

- **Certification Inconsistencies:** While JAKIM plays a critical role in certifying Halal practices in Malaysia, inconsistencies in the application of certification standards across the industry have been reported. Some producers fail to adhere strictly to the guidelines, leading to lapses in compliance (Haleem et al., 2021).
- **Logistical Challenges:** Maintaining the purity of Halal products during transportation is another significant challenge. Dedicated Halal vehicles and storage facilities are required to prevent contamination, but cost constraints often limit their availability (Fischer, 2008)
- **Stakeholder Awareness:** The knowledge and awareness of Halal principles among supply chain stakeholders vary widely. Insufficient training and understanding of Halal requirements can result in non-compliance, particularly in smaller poultry operations (Ali et al., 2022).
- **Global Variations in Standards:** The absence of uniform Halal standards globally adds to the complexity, especially for exporters aiming to cater to multiple markets with varying requirements (Alzeer et al., 2018).
- **Technological Integration:** While technologies such as blockchain offer solutions for traceability, their adoption in the poultry industry is still in its nascent stages, with high implementation costs and lack of technical expertise serving as barriers (Fischer, 2016).

Existing literature highlights the critical importance of Halal integrity in the poultry supply chain, with purity as a cornerstone of compliance. However, studies predominantly focus on broader supply chain challenges or specific elements such as logistics and certification. The "pure" dimension, encompassing detailed practices and systemic challenges, remains underexplored.

This study aims to address this gap by investigating purity practices in Malaysia's Halal poultry supply chain, providing insights into current practices, challenges, and potential improvements.

Methodology

This research adopts a qualitative approach using a multiple case study design to investigate the concept of purity in the Halal poultry supply chain in Malaysia. The multiple case study method is particularly suitable as it facilitates an in-depth exploration of practices across different poultry industries, providing a rich understanding of how purity is maintained and the challenges encountered. This approach ensures comprehensive insights by allowing for comparisons across varied contexts within the industry.

Data were collected through semi-structured, in-depth interviews with key stakeholders directly involved in maintaining Halal compliance. This method enabled the collection of detailed and nuanced insights into purity practices and challenges. Purposive sampling was employed to select informants who possess substantial experience and expertise in Halal poultry production. Following the guidelines of this technique ensured that the selected informants could provide critical information relevant to the research objectives (Cavana et al., 2001).

The study focused on Halal Executives from three leading poultry industries in Malaysia. The inclusion criteria were a minimum of four years of experience in Halal poultry production and direct involvement in maintaining and ensuring purity within their respective industries. The selected industries are prominent players in the Malaysian market, known for their commitment to Halal compliance and significant market share.

Data analysis was conducted using Atlas.ti software, adhering to Creswell's five-step framework:

- Familiarization: Reading and reviewing interview transcripts and field notes to identify initial impressions.
- Coding: Systematically coding data to highlight significant patterns and recurring themes.
- Thematic Categorization: Grouping related codes into broader themes, such as "pre-slaughter practices," "contamination prevention," and "Halal assurance systems."
- Theme Identification: Identifying and labelling the main themes and their interrelationships.
- Interpretation: Drawing conclusions by interpreting the observed patterns, comparing findings across cases, and understanding their implications for the Halal poultry supply chain.

A qualitative approach was chosen due to its ability to explore complex and subjective concepts such as purity within the Halal context. By focusing on stakeholder perceptions and practices, this methodology captures the intricate and context-specific factors that influence Halal integrity in the poultry supply chain.

Results and Findings

Company Background

Company A is based in Kedah and one of Malaysia's largest food producers with over 40 years of experience. Listed on the Main Board of Bursa Malaysia, it operates a fully integrated poultry farming and food processing business. Company A's operations include grand-parent and parent stock farming, broiler farming, chicken processing, and the manufacturing of further processed meat products. Their operations are spread across Peninsular Malaysia, and they emphasize sustainable farming practices, utilizing advanced technology and strict biosecurity measures. They supply major retailers like Lotus's and Giant, and their production capacity reaches approximately 50,000 chickens per day.

Company B, based in Melaka, began as a small-scale farm in 1999 and has since focused on its slaughterhouse and processing operations, achieving halal certification in 2019. The company produces over 57 different poultry products and sources chickens from MYGAP-certified suppliers. With a capacity of processing 10,000 chickens per day, Company B caters to customers across Melaka, Johor, and Kuala Lumpur, including major food manufacturers like Ayamas and Mamee.

Company C is based in Perak and a pioneer in Malaysian poultry operations that meets USDA standards. Known for its stringent quality assurance and biosecurity measures, Company C implements internationally recognized standards like HACCP, GMP, and ISO certifications. They maintain a Halal Assurance System to ensure halal integrity throughout their supply chain. With a daily capacity of 180,000 to 200,000 chickens, Company C supplies to major quick-service restaurants, including KFC, McDonald's, and Texas Chicken.

Informants were coded as P1, P2 and P3 representing their company respectively as shown in Table 1 below.

Profile of the Informants

Serial No.	Company Name	Working Experience in the field	Location
P1	Company A	9 years	Kedah
P2	Company B	4 years	Melaka
P3	Company C	8 years	Perak

Table 1. Profile of Informants from the Poultry Industry

The practice of the application of halal supply chain integrity in the context of halal poultry industries in Malaysia is based on the requirements from the Manual Procedure of the Malaysian Halal Certification Domestic (2020) and the MS1500:2019 Halal Food- General Requirement Third Revision. The researcher went to three different Poultry Industries in Malaysia which are known as Company A, Company B and Company C and interviewed their Halal Executives at the respective companies to collect data to see how the application of halal supply chain integrity is being practiced.

This section provides an in-depth analysis and comparison of the halal integrity dimension focusing on the "Pure" aspect, based on interviews from three poultry companies, denoted as P1, P2, and P3. In Table 2 below showed the pure dimension in three different stages of poultry supply chain. The detailed discussions are presented below.

Table 2. Pure Dimension on Halal Poultry Chain

Pure		P1	P2	P3	Total
Ex-Ante	Halal Feed	ü	ü	ü	100%
	Certified Chicken	ü	ü	ü	100%
In Process	Hanging	ü	ü	ü	100%
	Stunning	ü	ü	ü	100%
	Halal Inspection	ü	ü	ü	100%
Ex-Post	Storage and Transportation: Halal-dedicated vehicles only	ü	ü	ü	100%

*Ex-Ante**Halal Feed*

P1: "Yes here we do not inject any type of antibody for the chicken and all the feed is halal"

P2: "We don't take injected chicken because if it were injected, the chicken has black wings, so customers don't like it, because we supply a lot close to customers who buy canned food, so the quality is very important for them. That's why we take chickens from MYGAP. The chicken from MYGAP is really good"

P3: "So all the requirements from DVS, only the farm is eligible for us to agree to be eligible for us to take chicken from. We do not buy open-market chicken. We have our requirements and standards to take"

P1 emphasizes that no antibodies are injected into the chicken, and all feed is halal. P2 highlights that they avoid injected chickens, associate black wings with injections, and prefer chickens from MYGAP-certified farms to ensure quality. Meanwhile, P3 states that they only source chickens from farms that meet DVS standards and do not buy from the open market, ensuring high-quality feed. Prioritizing the use of halal feed, making sure there are no antibody injections, and procuring from approved sources are shared by all three companies. P1 concentrates on feed purity, whilst P2 and P3 particularly stress the need for certifications (MYGAP and DVS). From the start of the supply chain, the chicken will exceed halal criteria due to this constant reliance on halal feed.

Certified Chicken

P1: “We have contract farming and our farms. HQ will report if there is any issue regarding the farm. The meeting is held once every 3 months. We also have a representative from the vet department who controls the farm”

P2: “I am in charge of the application and so far, no problems regarding that. All our chickens are from a company certified by MYGAP. MYGAP is to prove that the chicken is good for consumption. And all our chicken is also approved by GVHP. GVHP is like a cert we need to prove the quality of our chicken, so MYGAP is under GVHP”

P3: “We broke in two. One own farm, one contract farm. For one day at least 70% come from our farm. 30% from the contract farm. We have agreed with a contract farm. Only farms that follow or get the standard from the veterinarian, such as MYGAP cert, have a poultry license. So, for all the requirements from DVS, only the farm is eligible for us to agree to be eligible to take chicken from. We do not buy open-market chicken. We have our requirements and standards to take”

P1 uses contract farming and regular meetings with vet department representatives to ensure farm compliance. P2 relies on MYGAP and GVHP certifications to ensure the quality and safety of their chickens. P3 utilizes both own and contract farms, ensuring that all farms have the necessary certifications like MYGAP. All three companies demonstrate a strong commitment to sourcing from certified suppliers. P1 relies on internal monitoring and regular vet department involvement, while P2 and P3 emphasize external certifications (MYGAP and GVHP). This practice ensures that the chickens are halal-certified and meet quality standards before entering the processing phase.

In Process

Hanging

P1: “We have a grading line. Chickens will hang on the grading line and will be kicked according to size. It is automatic. For example, a size of 1.5 or 1.6kg will go into the container”

P2: “Our first Halal Critical Point (HCP) is hanging, because we need to see the condition of the chicken if it is ok or not”

P3: “And then, we focus on hanging, if we look at halal there is animal welfare (animal welfare), for hanging. We control hanging not too rough, hanging the right way, the upper legs and the lower legs, all the legs are in the shackle, so most importantly it's not dead or weak. If the chicken dies, we label it DOA (Dead on arrival), it is not allowed to be hung at all, even weak birds are not allowed to be hung because if they enter the stunner, it will eventually die. Die because of the stunner, not because of the slaughter”

P1 implements an automatic grading line to ensure proper handling and size categorization of chickens. P2 identifies hanging as a critical control point (HCP) to assess the condition of the chicken. P3 focuses on humane hanging practices to prevent stress or death before stunning, with a system to label and manage DOA (Dead on Arrival) birds. All three companies have robust hanging procedures to ensure the chickens' well-being and proper handling. P1 uses automation, P2 focuses on condition assessment as a critical

control point, and P3 emphasizes humane handling to prevent the processing of weak or dead chickens. These practices align with halal requirements for animal welfare and proper handling.

Stunning

P1: “We use a water bath stunner. The voltage used depends on the size of the chicken. We use 60. Before this, we used 40-60v. That's the machine before the one we upgraded. Now we upgrade 28-70v. It depends on the size. For now, we put 1-2.0kg (28.40v), 2.0-2.50kg (38.8v), 2.5-3.0kg (47v), 3.1-4kg (58.7v), 4kg and above (69.0v). If we don't monitor the size, it will cause the chicken to die”

P2: “This is stunning with voltage, we will record, before, during and after. He follows the type of chicken. Now we rarely slaughter broilers because the price of broilers is expensive, now we focus on breeders and layers. So, this breeder is big, his voltage is quite high, he will follow the situation if the chicken does not wake up after stunning, we will reduce the voltage if it follows this standard 5.9v, 5.7v under 6v. if the breeder is big and old, so 6v-7v”

P3: “Usually, we use a minimum of 28v for the smallest chicken, size s, and a maximum of 38v for a slightly larger chicken. In daily practice, we will accept M and L-size chickens 1.5-2.5kg. For the two sizes, we use 32-34v. For large breeder chickens, usually, the chickens are 6-7kg. Will use 42-46v. The bigger the taller he is. If you look at it, the stunner is not efficient because you can see the chicken moving, but not flapping, because that's what we want, not being silent or not moving, we don't want to stun the chicken, we just want to weaken the chicken”.

P1 uses a water bath stunner with variable voltage based on chicken size to prevent death before slaughter. P2 records stunning parameters before, during, and after, adjusting voltage based on chicken type and size. P3 uses specific voltages for different sizes, ensuring chickens are only weakened, not killed, before slaughter. Stunning practices across all three companies are carefully regulated, with voltage adjustments based on the size and type of chicken to ensure compliance with halal requirements. P1 and P2 focus on recording and adjusting voltage, while P3 emphasizes minimal stunning to maintain chicken consciousness before slaughter, ensuring halal compliance.

Halal Inspection (Halal Checker)

P1: “The second critical part is the halal checker. He has two duties. The first is to check for any 'wrong cut'. Second, he has to make sure that the slaughtered chicken is dead before entering the tank. If the chicken is not dead, he will put the chicken in the basket let the chicken bleed completely and then hang it back”

P2: “Third HCP is slaughtering, we will look at the slaughtering according to shariah or not because sometimes our slaughterers make the wrong cut (wrong cut) because of that there will be a halal checker to make sure the chicken is safe and comply according to shariah, if not we will reject the chicken. This halal checker is also the fourth HCP”

P3: “Halal checker, the work of people who check the wrong cut bird is not broken. We usually put 6-7 people. People will take turns. Everyone has a certificate and knows whether a vein is broken or not. It's just an hour of people's work. We have a system here. At one time there are 4 people. The first person the chicken starts to reach the task is to check if the vein is broken, if he sees someone who wants to lift the chicken out of the shackle, he is the 2nd person. While he looks to see if it is broken”

P1 ensures that their halal checker confirms correct cuts and that chickens are dead before processing further. P2 also mentioned that their halal checker monitors slaughtering compliance with Shariah, rejecting non-compliant chickens. P3 employ multiple halal checkers to verify correct cuts and ensure veins are properly severed, rotating staff to maintain focus and accuracy. Halal inspection practices are rigorous across all companies, with dedicated halal checkers ensuring compliance with halal slaughter requirements. P1 and P2 focus on verifying correct cuts and ensuring death before scalding, while P3 employs multiple

checkers to maintain thorough oversight. These practices ensure the integrity of the halal process during slaughter.

Ex-Post

Storage and Transportation: Halal-Dedicated Vehicles Only

P1: “We do have a truck but it doesn't necessarily mean that he can drive all the time. We do have the one we have but for emergency planning. The statement is that the company (rented vehicle) has never brought goods that are not halal”

P2: “We have 4 lorries, still use our vehicle. The rent is 25k a month. That's why we don't take outside trucks, a lot of process. That's why I don't take risks, I don't like risks. Part of auditing, don't like argument”

P3: “So sometimes the goods are ok, but we were worried about our supplier's truck. The truck they send is mixed with other goods. So, we have to deal with security, if there is a supplier to send the ingredients to the people will check, whether it is mixed or not like a non-halal product, but for delivery we use our vehicle”

All three companies are consistent in using dedicated vehicles for transporting halal products, which is crucial for maintaining the purity and integrity of the halal supply chain. This practice ensures that the halal status of products is preserved from processing to delivery. Additional safety measures also be taken from P1 and P3 which stated that they will always look at plan B in case of emergency. The measures must be quick and need to make sure they do not breach the halal standards even though there will be some emergency. This showed that they are reliable and competent in making decisions.

Limitation

There were a few limitations in this research. The first limitation is time constraints. Like many research endeavours, this study faced challenges related to time. The researcher had limited time to conduct in-depth interviews with key stakeholders in the poultry industry, as most of the informants were occupied with their daily operations and responsibilities.

The second limitation of this research concerns the selection of informants. The study was limited to three poultry industries in Malaysia that are actively engaged in Halal poultry production. While these industries provided valuable insights, the findings may not fully represent the practices of the entire Malaysian poultry sector. Additionally, the researcher attempted to reach more companies within different regions of Malaysia but faced challenges due to a lack of response or willingness to participate. As a result, the interviews were primarily conducted with those who responded promptly, potentially limiting the diversity of perspectives in the study.

Conclusion

For pure dimension P1, P2, and P3 all emphasize the early morning arrival of chickens and proper handling to ensure animal welfare, with slight variations in timing and process specifics. Each plant uses adjustable voltage stunning to weaken rather than kill chickens, with variations in voltage ranges based on chicken size and type. Maintaining sharp knives through washing, sharpening, and sterilizing systems is consistent across all three plants. Regular training and awareness programs are a priority in all plants, with slight differences in training frequency and integration with other quality programs. Both P1 and P2 use chlorine for food safety, addressing public concerns and ensuring compliance with toyyiban standards. While there are slight differences in the specifics of their processes, P1, P2, and P3 share common goals and practices in maintaining halal integrity and ensuring food safety throughout their operations.

This study sheds light on the importance of purity in ensuring the integrity of the halal poultry supply chain, as guided by Islamic principles and Malaysia's halal standards. By looking closely at three prominent poultry

companies, it's clear that maintaining halal integrity isn't just about following rules—it's about putting in the effort at every stage, from the farm to the consumer.

Before processing, the focus on halal-certified feed and farms that meet strict standards lays a solid groundwork for purity. During processing, careful handling, controlled stunning methods, and precise slaughtering ensure that the chickens meet halal requirements while minimizing contamination risks. Finally, after processing, dedicated halal transport and proper storage protect the integrity of the products until they reach the end user.

However, challenges remain. Issues like contamination risks, inconsistent certifications, and logistical difficulties highlight areas where improvements are needed. These problems can erode consumer trust and impact Malaysia's strong reputation in the global halal market.

To tackle these challenges, the industry needs stricter enforcement of standards, better monitoring systems, and ongoing training for everyone involved in the supply chain. Incorporating advanced technologies like block-chain and IoT could also provide better traceability, making it easier to ensure every step aligns with halal principles.

By addressing these gaps and building on the strengths of the current system, this research offers practical steps to improve the halal poultry supply chain. As demand for halal products continues to grow worldwide, focusing on purity will not only meet consumer expectations but also help Malaysia remain a global leader in halal food production.

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